FREEWAVE FUSION BASIC

WIRELESS FLASH/SHUTTER
REMOTE TRIGGER

USER MANUAL

VELLO

THANK YOU FOR CHOOSING VELLO

The Vello FreeWave Fusion Basic is your passport to a new world of photography. It expands your photographic options with an easy-to-use radio remote trigger system that can trigger hot-shoe flashes or studio lights up to 50 feet away. Or you can trigger your camera's shutter up to 150 feet away (for photographing wildlife, for instance). Whether you're working on location or in a studio, the Fusion Basic frees you from sync cords so that you can put your flash and your camera exactly where you want them, producing exactly the photograph that you want.

The FreeWave Fusion Basic does not require line-of-sight alignment, as its radio waves pass through and around objects such as walls, windows, floors, and trees.

You can take single shots or shoot in continuous mode. You can use your camera's Bulb mode for long-exposure photographs. The FreeWave Fusion Basic is ideal for taking close-up or macro shots, too. The slightest camera movement (even when the camera is mounted on a tripod) while shooting these types of photos may cause blurry images. The FreeWave Fusion Basic allows you to trip the shutter without disturbing the camera, so there's no danger of camera movement. You can even make time-delay photos, perfect for when you want to include yourself in the picture.

Welcome to your new world of wireless photography.

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- FreeWave Fusion Basic Transmitter
- FreeWave Fusion Basic Receiver
- 2.5 mm to 3.5 mm sync cord
- 2.5 mm to PC male sync cord
- 3.5 mm to ¼" phono adapter
- Two AAA alkaline batteries
- One 23A 12v alkaline battery
- Instruction manual
- One-Year Limited Warranty

Receiver set (FWB-R)

- FreeWave Fusion Basic Receiver
- 2.5 mm to 3.5 mm sync cord
- 2.5 mm to PC male sync cord
- 3.5 mm to ¼" phono adapter
- Two AAA alkaline batteries
- Instruction manual
- One-Year Limited Warranty

Also Included With Canon Set (FWB-C)

- Shutter Remote 2.5 mm to Canon 2.5 mm Shutter Release Cable (RCC-C1)
- Shutter Remote 2.5 mm to Canon 3-Pin Camera Shutter Release Cable (RCC-C2)

Also Included With Nikon Set (FWB-N)

- Shutter Remote 2.5 mm to Nikon 10-Pin Camera Shutter Release Cable (RCC-N1)
- Shutter Remote 2.5 mm to Nikon DC2 Camera Shutter Release Cable (RCC-N2)

KEY FEATURES

Wireless Hot-Shoe Flash Trigger System: Trigger a hot-shoe (on-camera-type) flash up to 50 feet away.

Wireless Studio Flash Trigger System: Trigger a studio flash up to 50 feet away.

Wireless Control System: Trigger your camera's shutter up to 150 feet away.

Flash Sync Speed of up to 1/200s: Take advantage of sync speeds that match the rating of your camera up to 1/200th of a second (compatible cameras only).

16 Channels: Multiple channels allow you to change your transmitter/receiver settings to avoid interference from other wireless remote controls.

Multi-Purpose Flash Trigger: You can use multiple optional Receivers (available separately) to trigger many flashes with a single Transmitter.

Multi-Purpose Shutter Trigger: You can use the shutter release remote trigger to trigger multiple cameras, as well as different types of cameras, by simply swapping out the included connection cable for a different connection cable (available separately).

LED Indicator Lights: Confirms communication of trigger system with pre-focus, shutter release, and flash trigger in wireless mode.

Dual-Function Shutter Release Button: Press halfway to focus; press fully to trigger the shutter.

Long-Exposure Photography: Use the FreeWave Fusion Basic with your camera's Bulb setting to make exposures as long as the camera will support, without touching the camera, as even the slightest touch may cause blurred photos.

Macro Photography: The lightest touch to your camera, such as pushing the shutter release button, is magnified when shooting macro or close-up photos, resulting in blurred pictures—using the FreeWave Fusion Basic eliminates the chance of accidental camera movement.

Compatible: Most hot-shoe lights, studio lights, and cameras are compatible with the FreeWave Fusion Basic .

Single Shot & Continuous Shooting Modes: Allows user to fire the camera without touching the camera itself, avoiding possible camera shake.

Wildlife Photography: Use the FreeWave Fusion Basic to release the shutter from a safe distance for photos of hard-to-approach wildlife.

PRECAUTIONS

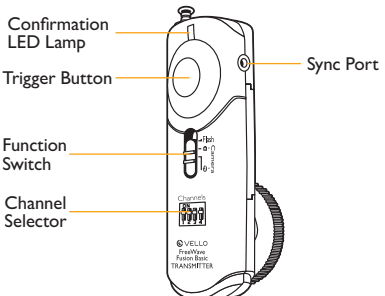
- There are no user-serviceable parts inside the devices. Do not attempt to disassemble or perform any unauthorized modification.
- Do not operate the FreeWave Fusion Basic in the presence of flammable gas or vapors.
- Do not handle with wet hands or immerse in or expose to water or rain. Failure to observe this precaution could result in fire or electric shock.
- Keep out of reach of children. This device contains small parts which may pose a choking hazard.
- Observe caution when handling batteries. Batteries may leak or explode if improperly handled. Use only the batteries listed in this manual. Make certain to align the batteries with the correct polarity.
- Batteries are prone to leakage when fully discharged. To avoid damage to the product, be sure to remove the batteries when leaving the product unattended for prolonged periods or when no charge remains.
- Handle the unit with care.

- Do not use or leave the devices in conditions of extreme heat, severe cold, or high humidity.
- Turn off the camera's power before inserting or removing the remote cord.
- Dispose of used batteries, packaging, and old devices in accordance with appropriate local environmental regulations.
- Please read and follow these instructions, and keep this manual in a safe place.
- Clean the unit with a soft, dry cloth.
- Use only parts provided by the manufacturer.
- Make sure the item is intact and that there are no missing parts.
- All photos are for illustrative only.

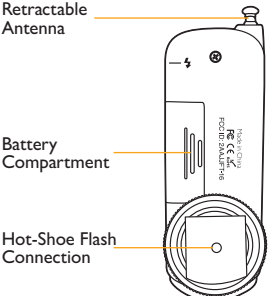
OVERVIEW

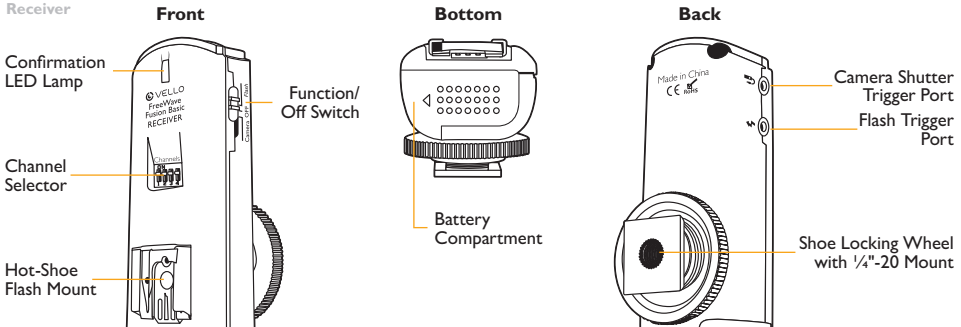
Transmitter

Front



Back




Front
Bottom
Back
Confirmation LED Lamp
Function/ Off Switch
Channel Selector
Hot-Shoe Flash Mount
Battery Compartment
Camera Shutter Trigger Port
Flash Trigger Port
Shoe Locking Wheel with ¼"-20 Mount
VELLO
FreeWave Fusion Basic RECEIVER
Channels
Camera
Flash
Made in China

COMPATIBLE DEVICES

The FreeWave Fusion Basic is compatible with most hot-shoe lights, studio lights, and cameras.

The FreeWave Fusion Basic does not transmit through-the-lens (TTL) settings; therefore, we recommend using a fully manually controlled flash with this device. The power output must always be set manually.

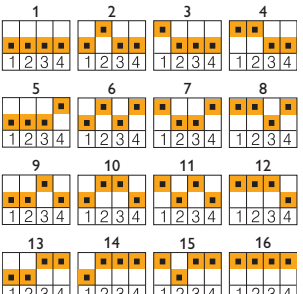
Most flashes that can be operated manually are compatible with the FreeWave Fusion Basic. The only flashes that are not compatible are Pentax, Sony/Minolta, and Sony Multi-Interface flashes.

BEFORE YOU BEGIN

When you remove the Transmitter and the Receiver from the box, you will notice a set of four small numbered switches on the top of each instrument. These identical channel selector switches allow you to change the channel on which your Transmitter and Receiver operate. Each of the four switches has two positions.

Note: Make sure that both the Transmitter and Receiver are set to the same channel.

You can change the channel by moving the position of one or more channel switches using a ballpoint pen. In this way, you can avoid interference from any source. For instance, if other photographers are working in the same area as you and using radio remote controls, you can change the channel on your FreeWave Fusion Basic Transmitter and Receiver so that their transmitters don't trigger your lights, and vice versa.



POWERING UP

After you've set both the Transmitter and Receiver to the same channel, place the correct batteries in the devices. Insert the two included AAA batteries in the battery compartment of the Receiver, being careful to orient them with the correct polarity marked on the inside of the battery cover. Then, open the battery compartment on the Transmitter and insert the included 23A battery using the correct polarity.

On the side of the Receiver is a switch labeled Camera/Off /Flash. To conserve battery power, you should keep the switch in the Off position except when the Receiver is actually in use. Slide the switch to "Flash" if you're using it as a remote flash trigger or to "Camera" if you're using the set as a remote wireless camera shutter trigger. The Transmitter battery has a life of approximately two years in standby mode. It has no On/Off button.

Note: Many modern flashes and cameras have a Sleep mode. You must turn off the Sleep mode in your flash or camera before using the Fusion Basic. Refer to your flash or camera user manual for instructions.

GETTING STARTED

The FreeWave Fusion Basic can perform two major functions (with several variations): A) It can wirelessly trigger a hot-shoe flash or a studio flash or B) it can wirelessly trigger a camera shutter, including single shot and continuous shooting, long exposures (Bulb mode), and time-delay.

When using the Fusion Basic to trigger a flash, follow these instructions.

Note: the shutter release and flash trigger options cannot be used simultaneously.

Mounting the Transmitter

1. With your camera and Receiver Off, loosen the Transmitter's hot-shoe locking ring.

2. Insert the Transmitter's hot shoe into the camera's hot-shoe mount.

3. Tighten the Transmitter's hot-shoe locking ring.

Note: For cameras with a PC connection, you can use the included 2.5mm to PC sync cable to connect to the Transmitter. Mount the Transmitter on a bracket, plug the PC end of the cable into the camera's PC connection and plug the other end into the Transmitter's sync port.

Mounting the Receiver

There are two ways you can mount the Receiver:

1. Mount the Receiver to a light stand using the threaded socket for a standard ¼" screw mount on the bottom of the Receiver.

2. Use the accessory shoe (cold shoe) foot to mount the Receiver to a cold shoe bracket.

WIRELESSLY TRIGGER A HOT-SHOE FLASH

1. Check to be sure that both the Transmitter and Receiver are set to the same channel.

2. With your hot-shoe flash and Receiver off, mount your flash onto the hot shoe of the Receiver.

3. Move the Function Switch on both the Receiver and on the Transmitter to "Flash."

4. Confirm that the camera, Transmitter, Receiver, and flash are all powered on.

5. Set the desired power output on the flash manually.

6. Fully press the shutter button on your camera. All lights connected to Receivers operating on the same channel as the Transmitter should fire simultaneously.

Note: We recommend using a fully manually controlled flash with this device. The FreeWave Fusion Basic does not transmit TTL settings, so you will always need to set the power output manually.

Note: If the FreeWave Fusion Basic doesn't trigger your flash or camera on the first attempt, try changing the channel on the Transmitter and the Receiver using the Channel Selectors until you find a channel that works.

WIRELESSLY TRIGGER A STUDIO FLASH

Using the FreeWave Fusion Basic helps you to eliminate cord clutter when setting up studio lights. You can also trigger multiple lights by using additional FreeWave Fusion Basic Receivers (available separately).

To use the FreeWave Fusion Basic to wirelessly trigger a studio flash, follow these instructions:

1. Check to be sure that both the Transmitter and Receiver are set to the same channel.
2. Turn your camera and Receiver Off.
3. Use the included studio light (2.5mm to 3.5mm) sync cable to connect to a studio flash.
4. Plug the 2.5 mm side of the cable into the Receiver's flash sync [ϟ] port.

5. Plug the 3.5 mm side of the cable into the studio flash sync jack.

6. If your studio flash has a ¼" phono jack, use the included 3.5 mm to ¼" phono adapter.

7. With your camera and Transmitter off, loosen the Transmitter's hot-shoe locking ring.

8. Insert the Transmitter's hot shoe into the camera's hot-shoe mount, and tighten the hot-shoe locking ring.

9. Move the Function Switch on both the Receiver and on the Transmitter to "Flash."

10. Confirm that the camera, Transmitter, Receiver, and studio light are all powered on.

11. Fully press the shutter button on your camera. All lights connected to Receivers operating on the same channel as the Transmitter should fire simultaneously.

USING THE FREEWAVE FUSION BASIC AS A REMOTE SHUTTER RELEASE

Using the FreeWave Fusion Basic, you can trigger the shutter on your camera wirelessly. You can shoot in normal modes (single shot and continuous shooting), long-exposure (Bulb) mode, and time-delay mode from up to 150 feet away from your camera.

To use the remote shutter release function, you will need to use one of the two included FreeWave Fusion Basic shutter release cables. There are two shutter release cables provided for Canon cameras and two shutter release cables provided for Nikon cameras, depending upon which set you have purchased.

Note: the FreeWave Fusion Basic can also be used with other camera. See the enclosed Camera Compatibility Insert.

TRIGGER YOUR CAMERA FOR SINGLE SHOTS

1. Set your camera to single shot mode.
2. Attach the appropriate shutter release cable to the shutter release [ ] port on the Receiver and to the camera.
3. Mount the Receiver to the camera's hot shoe.
4. Set the Function Switch on the Receiver to "Camera".
5. Set the Function Switch on the Transmitter to [ ].
6. Hold the Transmitter in your hand with the antenna extended.
7. Press the trigger button on the Transmitter halfway to focus. Confirmation LEDs on both the Transmitter and Receiver should turn blue.
8. Press the trigger button all the way—the LED will turn red, and the shutter will be triggered. The LED on the Receiver also turns red when the shutter is triggered.

TRIGGER YOUR CAMERA FOR CONTINUOUS SHOOTING

1. Set your camera to continuous shooting mode.

2. Attach the appropriate shutter release cable to the shutter release [ ] port on the Receiver and to the camera.

3. Mount the Receiver to the camera's hot shoe.

4. Set the Function Switch on the Receiver to "Camera."

5. Set the Function Switch on the Transmitter to [ ].

6. Press the trigger button halfway to select your focus point. Press and hold the trigger button down on the Transmitter, and the camera will shoot continuously.

7. If you hold the button for 1 to 3 seconds, the camera will stop shooting when you remove your finger from the button. If you hold the button down for more than 3 seconds, the camera will continue shooting when you take your finger off the button. To stop taking photos, press the trigger button again.

TRIGGER YOUR CAMERA IN BULB MODE FOR A LONG EXPOSURE

1. Set the camera to Bulb mode.
2. Attach the appropriate shutter release cable to the shutter release [ ] port on the Receiver and to the camera.
3. Mount the Receiver to the camera's hot shoe.
4. Set the Function Switch on the Receiver to "Camera."
5. Set the Function Switch on the Transmitter to [ ].
6. Half-press the trigger button on the Transmitter to focus the lens on the camera.
7. Full-press the trigger button to open the shutter. Releasing the trigger button within 3 seconds, will close the shutter. If you hold the button down for more than 3 seconds, the shutter will remain open when you remove your finger from the button, and it will close only when you press the trigger button again.

TRIGGER YOUR CAMERA IN SELF-TIMER (DELAY) MODE

1. Set the camera to single shot mode.
2. Attach the appropriate shutter release cable to the shutter release [ ] port on the Receiver and to the camera.
3. Mount the Receiver to the camera's hot shoe.
4. Set the Function Switch on the Receiver to "Camera".
5. Set the Transmitter Function Button to [ ].
6. Half-press the trigger button on the Transmitter to focus.
7. Full-press the trigger button and the confirmation LED on the Receiver will begin to blink red. The shutter will be activated 5 seconds from when you first pressed the trigger button to take the picture.

Tip: When using the FreeWave Fusion Basic to trip your camera shutter, if the camera is set to autofocus, the shutter will only be triggered if the autofocus mechanism is locked onto a focus point. For this reason, it's best to use manual focus when using the remote controls to trigger the shutter.

SPECIFICATIONS

	Canon Set (FWB-C)	Nikon Set (FWB-N)	Receiver (FWB-R)
Wireless Transmitter	✓	✓	
Wireless Receiver	✓	✓	✓
2 AAA Alkaline Batteries	✓	✓	✓
One 23A Alkaline Battery	✓	✓	
2.5mm to 3.5mm sync Cable	✓	✓	✓
2.5mm to PC sync Cable	✓	✓	✓
3.5mm to Phono Plug Adapter	✓	✓	✓
Shutter Release Cable(s)	RCC-C1 RCC-C2	RCC-N1 RCC-N2	
Instruction Manual	✓	✓	✓

	Transmitter	Receiver
Dimensions (L×H×W)	3.62 × 1.11 × 1.37" (92 × 25.4 × 34.92 mm)	3.25 × 1.50 × 1.38" (82.5 × 38.2 × 35.0 mm)
2.5mm to 3.5mm sync Cable	Approximate coiled length 13" (33 cm) Approximate uncoiled length 26" (66 cm)	
2.5 mm to PC straight sync Cable	Approximately 12" (30.5 cm)	
Frequency	433MHz	
Channel settings	16 possible channels	
Shutter modes	Single Shot, Continuous Shooting, Bulb, Self-Timer	
Confirmation LEDs	2 color—blue and red	

	Transmitter	Receiver
Power	1 × 23A 12v alkaline battery	2 × AAA alkaline batteries
Battery life (in stand-by mode)	2 years	approximately 300 hours
Range	Flash trigger up to 50' (15.24 m) Shutter trigger up to 150' (45.7 m)	
Weight	1.1 oz (31.18 g)	1.5 oz (42.52 g)

TROUBLESHOOTING

Problems with the FreeWave Fusion Basic can usually be traced to the following causes:

- Check the contact between the flash's hot-shoe foot and the Receiver's hot shoe to be certain that the flash is properly seated. Make sure the light's locking switch is set to the lock position when mounted in the Receiver's hot shoe.

- Make sure that the Receiver is powered on and at the correct setting.

- Check that the shutter release cable and/or studio light cable are in good condition and properly connected.

- If you encounter any interference on the initial setting, remove the batteries from the Transmitter and Receiver, and change the channel by rearranging the channel selector switches to a different combination. Take care to ensure that both the Transmitter and Receiver are set identically. Then replace the batteries and proceed.

- When using the FreeWave Fusion Basic as a shutter release, your camera may not be able to release the shutter if the lens is set to Auto Focus and focus cannot be achieved on a subject. Switch your camera to manual focus and focus the camera to ensure proper shutter release.

FCC COMPLIANCE

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference

2. This device must accept any interference received, including interference that may cause undesired operation.

ONE-YEAR LIMITED WARRANTY

This VELLO product is warranted to the original purchaser to be free from defects in materials and workmanship under normal consumer use for a period of one (1) year from the original purchase date or thirty (30) days after replacement, whichever occurs later. The warranty provider's responsibility with respect to this limited warranty shall be limited solely to repair or replacement, at the provider's discretion, of any product that fails during normal use of this product in its intended manner and in its intended environment. Inoperability of the product or part(s) shall be determined by the warranty provider. If the product has been discontinued, the warranty provider reserves the right to replace it with a model of equivalent quality and function.

This warranty does not cover damage or defect caused by misuse, neglect, accident, alteration, abuse, improper installation or maintenance. EXCEPT AS PROVIDED HEREIN, THE WARRANTY PROVIDER MAKES NEITHER ANY EXPRESS WARRANTIES NOR ANY IMPLIED WARRANTIES, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. This warranty provides you with specific legal rights, and you may also have additional rights that vary from state to state.

To obtain warranty coverage, contact the Vello Customer Service Department to obtain a return merchandise authorization ("RMA") number, and return the defective product to Vello along with the RMA number and proof of purchase. Shipment of the defective product is at the purchaser's own risk and expense.

For more information or to arrange service, visit www.vellogear.com or call Customer Service at 212-594-2353.

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